

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1~~1~~₂ (Currently Amended) A method of manufacturing surge arrestors, the method ~~being of the type~~ comprising the steps ~~consisting in~~ of:

making a stack of varistors ~~(10)~~; and

forming a coating ~~(40)~~ of composite material on the stack of varistors ~~(10)~~;

~~the method being characterized by the fact that~~ wherein:

between the steps of making the stack and forming the coating of composite material ~~(40)~~, the method includes the step of depositing a bead ~~(30)~~ of flexible, adhesive, and dielectric material on the previously-formed stack in register with the various interfaces between each adjacent pair of varistors.

2~~1~~₂ (Currently Amended) A method according to claim 1, ~~characterized by the fact that~~ wherein the beads ~~(30)~~ of flexible, adhesive, and dielectric material are made on the basis of an elastomer or a gel, preferably of silicone material.

3~~1~~₂ (Currently Amended) A method according to claim 1 ~~or claim 2, characterized by the fact that~~ wherein the material constituting the beads ~~(30)~~ is adapted to eliminate all pockets of air from the interfaces between each adjacent pair of varistors ~~(10)~~, to prevent material penetrating

into said interfaces, and to provide elastic bonding between the stack of varistors ~~(10)~~ and the coating ~~(40)~~ of composite material.

4~~1~~₂ (Currently Amended) A method according to ~~any one of claims 1 to 3~~ claim 1, ~~characterized by the fact that~~ wherein each bead ~~(30)~~ has a typical width of 5 mm and a thickness of less than 5 mm.

5~~1~~₂ (Currently Amended) A method according to ~~any one of claims 1 to 4~~ claim 1, ~~characterized by the fact that~~ wherein the material constituting the beads ~~(30)~~ has no acetic acid.

6~~1~~₂ (Currently Amended) A method according to ~~any one of claims 1 to 5~~ claim 1, ~~characterized by the fact that it further comprises~~ comprising the steps ~~consisting in~~ of depositing an outer envelope ~~(60)~~ on the coating ~~(40)~~ of composite material and using said outer envelope ~~(60)~~ as a mold for shaping the body of the arrestor by a radial compression effect during a polymerization step.

7~~1~~₂ (Currently Amended) A method according to claim 6, ~~characterized by the fact that~~ wherein the outer envelope ~~(60)~~ possesses annular fins.

8~~7~~. (Currently Amended) A method according to ~~any one of claims 1 to 7~~ claim 1, ~~characterized by the fact that it further comprises~~ comprising the step ~~consisting in~~ of depositing beads of adhesive/sealing agent ~~(50)~~ on the coating of composite material ~~(40)~~ prior to installing the outer envelope ~~(60)~~.

9~~7~~. (Currently Amended) A method according to claim 8, ~~characterized by the fact that~~ wherein the beads ~~(50)~~ of adhesive/sealing agent deposited on the coating of composite material ~~(40)~~ are made of silicone mastic.

10~~7~~. (Currently Amended) A method according to claim 8 ~~or claim 9~~, ~~characterized by the fact that~~ wherein the beads ~~(50)~~ of adhesive/sealing agent deposited on the coating of composite material ~~(40)~~ are shaped as rings.

11~~7~~. (Currently Amended) A method according to ~~any one of claims 1 to 10~~ claim 1, ~~characterized by the fact that~~ wherein the coating of composite material ~~(40)~~ is wound helically.

12~~7~~. (Currently Amended) A method according to ~~any one of claims 1 to 11~~ claim 1, ~~characterized by the fact that~~ wherein the coating of composite material ~~(40)~~ is made by helically winding a preimpregnated woven tape with overlap of 50%.

13~~7~~. (Currently Amended) A method according to ~~any one of claims 1 to 12~~ claim 1, ~~characterized by the fact that~~ wherein the coating of composite material (40) has rings of preimpregnated woven tape deposited in register with the interfaces between adjacent pairs of varistors (10).

14~~7~~. (Currently Amended) A method according to claim 13, ~~characterized by the fact that~~ wherein the arrestor also has an envelope deposited on the coating of composite material (40) to reinforce the dielectric behavior of the arrestor.

15~~7~~. (Currently Amended) A method according to ~~any one of claims 1 to 14~~ claim 1, ~~characterized by the fact that~~ wherein the coating of composite material (40) ~~preferably~~ based on glass fibers and epoxy resin, has a resin content lying in the range one-third to one-half by weight.

16~~7~~. (Currently Amended) A method according to ~~any one of claims 1 to 15~~ claim 1, ~~characterized by the fact that~~ wherein the coating of composite material (40) is made under axial compression of the stack of varistors (10).

17~~7~~. (Currently Amended) A method according to ~~any one of claims 1 to 16~~ claim 1, ~~characterized by the fact that~~ wherein the varistors (10) are not enameled.

18½ (Currently Amended) A method according to ~~any one of claims 1 to 16~~ claim 1, characterized by the fact that wherein the varistors (10) are coated in a fine protective film of a lead-free enamel.

19½ (Currently Amended) A surge arrestor ~~of the type~~ comprising a stack of varistors (10) and a coating of composite material (40), the arrestor ~~being characterized by the fact that it~~ further ~~comprises~~ comprising beads (30) of flexible, adhesive, and dielectric material in register with the various interfaces between each adjacent pair of varistors (10).

20½ (Currently Amended) An arrestor according to claim 19, ~~characterized by the fact that~~ wherein the beads (30) of flexible, adhesive, and dielectric material are based on silicone material.

21½ (Currently Amended) An arrestor according to claim 19 ~~or claim 20~~, characterized ~~by the fact that it~~ further ~~comprises~~ comprising an outer envelope (60) having annular fins.

22½ (Currently Amended) An arrestor according to ~~any one of claims 19 to 21~~ claim 1, characterized by the fact that it further ~~comprises~~ comprising beads (50) of an adhesive/sealing agent between the coating of composite material (40) and an outer envelope (60).

23~~7~~. (Currently Amended) An arrestor according to claim 22, ~~characterized by the fact that~~ wherein the beads (50) of adhesive/sealing agent deposited on the coating of composite material (40) are made of silicone mastic.

24~~7~~. (Currently Amended) An arrestor according to ~~any one of claims 19 to 23~~ claim 1, ~~characterized by the fact that~~ wherein the coating of composite material (40) is made by helically winding a preimpregnated woven tape with overlap of 50%.

25~~7~~. (Currently Amended) An arrestor according to ~~any one of claims 19 to 24~~ claim 1, ~~characterized by the fact that~~ wherein the coating of composite material (40) has a resin content lying in the range one-third to one-half by weight.

26~~7~~. (Currently Amended) An arrestor according to ~~any one of claims 19 to 25~~ claim 1, ~~characterized by the fact that~~ wherein the varistors (10) are not enameled.

27~~7~~. (Currently Amended) An arrestor according to ~~any one of claims 19 to 25~~ claim 1, ~~characterized by the fact that~~ wherein the varistors (10) are coated in a fine protective film of lead-free enamel.